

**Abstract**

The invention relates to circuit elements and computing networks for resolving logical entanglement, in which the allowed logical value of a variable in a set of variables depends on the logical values of the other variables in the set. A circuit element according to the invention comprises two or more logically entangled bi-directional terminals, wherein each bi-directional terminal can assume any one of three logical states, which are a logical true state, a logical false state, and an indefinite state, in which state the bi-directional terminal accepts one of the logical true and logical false states as an external input from an external source. An entanglement logic resolves the logical state of the bi-directional terminals according to a predetermined set of logical entanglement rules between the bi-directional terminals.

(Figure 3A)